



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/777,366

02/12/2004

Jean-Claude Girard

DN2003217

5090

27280

7590

12/12/2007

THE GOODYEAR TIRE & RUBBER COMPANY
INTELLECTUAL PROPERTY DEPARTMENT 823
1144 EAST MARKET STREET
AKRON, OH 44316-0001

EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/777,366
Filing Date: February 12, 2004
Appellant(s): GIRARD ET AL.

MAILED

DEC 12 2007
GROUP 1700

Richard B. O'Planick
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 10, 2007 appealing from the
Office action mailed February 9, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct. Note however that the rejection of claims 9-13 under 35 USC §112, first paragraph has been withdrawn by the examiner, as set forth in item (6) below.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner:

The rejection of claims 9-13 under 35 USC §112, first paragraph has been withdrawn by the examiner.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct. Note that only claims 9-13 are subject to this Appeal, claims 1-8 being withdrawn.

(8) Evidence Relied Upon

3,662,335

Fritze

5-1972

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

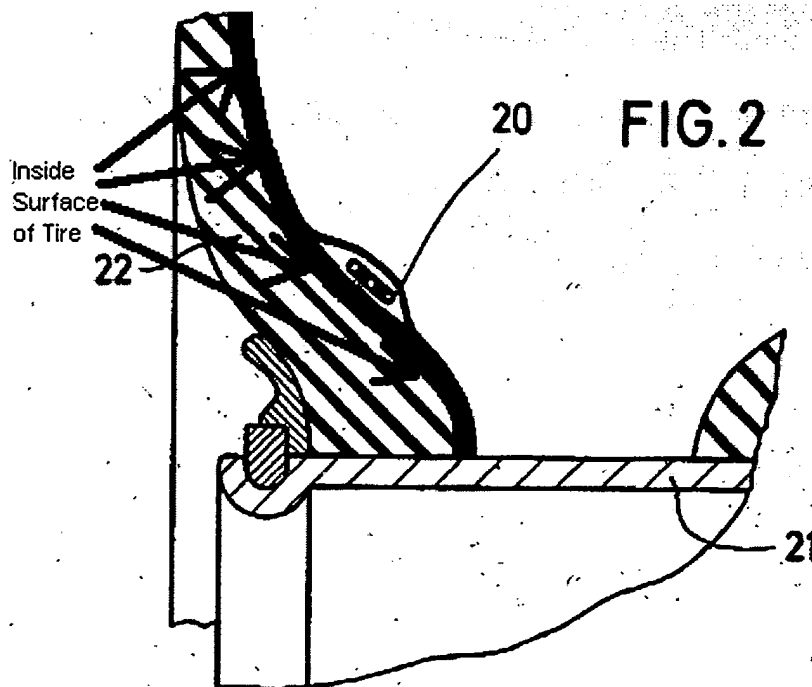
Claims 9-13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Fritze (US 3,662,335).

Claim 9 is directed to a tire having an antenna assembly affixed to an inward surface, the tire being characterized by the process to make the tire. However, although defined by the process, "product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps" (MPEP 2113). Here, the structure implied by the claimed steps is a tire having an antenna assembly affixed to an inner/inward surface of the tire by bonding during a cure cycle, the antenna assembly projecting from the inner/inward surface of the tire to face the inner cavity of the tire.

Fritze discloses a tire (22 in Figure 2) and an antenna assembly vulcanized to the inside of the tire, the antenna assembly projecting from the inside surface to face the tire inner cavity - note especially Figure 2 and col. 3, lines 59-66. In particular, in

describing the location of the antenna assembly in Figure 2, Fritze expressly describes that the "oscillator-antenna unit is vulcanized to the *inside* of the tire in proximity to the radial rim outer edge" (col. 3, lines 62-64; emphasis added). Since described as vulcanized to the inside of the tire, the assembly is bonded during a cure (i.e. vulcanization) cycle. The antenna assembly also is clearly depicted to project from the inner surface of the tire to face the inner cavity of the tire (Figure 2). The structural features of the tire implied by the steps of claim 9 are therefore considered to be clearly met by Fritze.

The following marked up copy of Figure 2 of Fritze was previously provided by the examiner responsive to arguments by Appellants and is included here to further emphasize what is the antenna assembly and what is the inner surface of the tire (i.e. the tire is the *cross-hatched part 22* and the inner surface thereof is thus as indicated).



Thus, the added highlighted black line represents the inside surface of the tire while the entire protruding assembly inward thereof (including strands 20 as well as surrounding material) represents the antenna *assembly* (in the same way that appellants antenna assembly includes the wires 32 *encapsulated* within strip 36 - see paragraph [0011] on page 4 of appellants specification). Again, the claims do not define or imply any tire structure that would distinguish this.

As to dependent claims 10-13, these claims relate to specific features of the method that do not define or imply additional structure beyond that shown in Fritze. As to claim 13 in particular, this claim relates principally to a particular configuring of the core recess, not any clear additional requirement with respect to the antenna assembly in the tire. In any event, to the extent that this claim is read to require a sensor housing component, Fritze indicates that the antenna assembly includes other components such as the oscillator (13) as well as switch (15) and drive (16), any one of these satisfying the requirement for such a sensor housing component as they all are part of the sensor device in the reference.

(10) Response to Argument

The arguments with respect to the rejection of claims 9-13 under 35 USC §112, first paragraph are moot as this rejection has been withdrawn by the examiner in view of appellants' arguments - note part 6 above.

Appellants' arguments with respect to the prior art rejection will be treated in the order presented in appellants' brief. In particular, with respect to the prior art rejection over Fritze, Appellants argue that

"the Fritze tire does not meet the following structural features of the tire formed by the claimed steps:

a tire having an antenna assembly having an inward peripheral boundary and an exposed outward peripheral boundary;

a tire having an antenna assembly in which an outward boundary of the antenna assembly is cross-bonded to the inner surface of the tire;

and a tire having an antenna assembly in which an inward antenna assembly boundary is unbonded to the tire and faces an inner cavity of the tire."

From the depiction in Figure 2 read with the description that the "oscillator-antenna unit is vulcanized to the inside of the tire in proximity to the radial rim outer edge" (col. 3, lines 62-64), it is however submitted that the tire clearly meets each of these requirements. The tire (22) is depicted by cross-hatching in Figure 2, the entire protruding assembly inward from the tire (including the strands 20 as well as the surrounding supporting material) representing the *antenna assembly*. Note again the marked up copy of Figure 2 in the statement of rejection. The outward surface of this assembly is vulcanized (i.e. bonded during a cure cycle) to the inner surface of the tire and the inward surface of this assembly is unbonded to the tire and faces an inner cavity of the tire.

Appellants also urge that "Fritze identifies as the antenna the conductors 20 which reside within the sidewall of the tire in each and every embodiment disclosed." While the reference does identify the strands 20 as part of the antenna unit, they do not "reside within the sidewall of the tire in each and every embodiment disclosed". As already discussed, in the relevant embodiment (Figure 2), the antenna assembly is vulcanized to the inside of the tire, not embedded within the tire sidewall. It should also be noted that contrary to appellants argument that they reside in the sidewall for "each

and every embodiment," the antenna assembly is not even attached to (and certainly not within) the tire in the other embodiments (figures 3-4).

Appellants then contend that

"In order to determine whether Fritze anticipates the claims, therefore, it is essential that the Fritz antenna 20:

1. Include an inner and outer boundary.
2. Include an outward boundary that is cross-bonded to the inner surface of the tire during a cure cycle.
3. Include an inner boundary that remains unbonded to the tire and facing an inner cavity of the tire after the antenna outward boundary is cross-bonded to the inner surface of the tire."

This is not the correct inquiry. More properly, at issue is whether the antenna assembly has an outward boundary bonded to the tire and inward boundary unbonded to the tire and facing the inner cavity. Again, the entire protruding assembly inward from the tire (including the strands 20 as well as the surrounding supporting material) represents the *antenna assembly* (in the same way that appellants antenna assembly includes the wires 32 *encapsulated* within strip 36 - see paragraph [0011] on page 4 of appellants specification). Note again the marked up copy of Figure 2 in the statement of rejection. The outward surface of this assembly is vulcanized (i.e. bonded during a cure cycle) to the inner surface of the tire and the inward surface of this assembly is unbonded to the tire and faces an inner cavity of the tire.

Appellants then more explicitly urge that the copper strands 20 constitute the "assembly" and these alone must meet the claimed requirements (boundaries, etc) with respect to the antenna assembly. It is submitted however that this is an incorrect interpretation of the claims and/or Fritze patent, the entire protruding assembly inward from the tire (including the strands 20 as well as the surrounding supporting material)

representing the *antenna assembly* (in the same way that appellants antenna assembly includes the wires 32 encapsulated within strip 36 - see paragraph [0011] on page 4 of appellants specification). Note again the marked up copy of Figure 2 in the statement of rejection. The outward surface of this assembly is vulcanized (i.e. bonded during a cure cycle) to the inner surface of the tire and the inward surface of this assembly is unbonded to the tire and faces an inner cavity of the tire.

With respect to the comment at the top of page 10 of Appellants' brief, this discussion is moot as the June 11, 2007 amendment was entered (note further that the previous May 7, 2007 amendment was refused entry because it was non-compliant, not because of the claim 9 correction).

Appellants then refer to the May 25, 2007 Advisory Action and again argue that the strands 20 "are within the tire sidewall" and are the "antenna assembly." This argument is not persuasive for the same reasons already discussed in detail above.

It is further argued that "[t]o include the material of the sidewall surrounding the antenna 20 of Fritze as part of the antenna contradicts the literal definition in Fritze that it is the element 20 which constitutes the antenna assembly." More properly, at issue is what in the Figure 2 embodiment of Fritze would have been consistent with the term "antenna assembly" as used in the claims (this terminology being read consistent with appellants' disclosure). Note especially again that the *antenna assembly* is described by appellants as including the wires 32 encapsulated within strip 36 - see paragraph [0011] on page 4 of appellants specification), this being entirely consistent with the entire protruding assembly inward from the Fritze Figure 2 tire (including the strands 20

as well as the surrounding supporting material) representing the *antenna assembly*.

Note again the marked up copy of Figure 2 in the statement of rejection. The outward surface of this assembly is vulcanized (i.e. bonded during a cure cycle) to the inner surface of the tire and the inward surface of this assembly is unbonded to the tire and faces an inner cavity of the tire.


The argument that the "Fritze teaching, Applicants maintain, is to embed the antenna assembly 20 within the tire sidewall, not cross bond the assembly against an inside tire surface during the tire cure cycle" is contradicted by the explicit teaching in the reference that "oscillator-antenna unit is vulcanized to the *inside* of the tire in proximity to the radial rim outer edge" (col. 3, lines 62-64; emphasis added), it again being emphasized that the antenna assembly is *not* simply the copper strands 20.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Geoffrey L. Knable
Primary Examiner
Art Unit 1791

Conferees:

Richard Crispino


Romulo Delmendo